

REMARKS

Claims 1 and 4-20 currently appear in this application. The Office Action of August 3, 2004, has been carefully studied. These claims define novel and unobvious subject matter under Sections 102 and 103 of 35 U.S.C., and therefore should be allowed. Applicants respectfully request favorable reconsideration, entry of the present amendment, and formal allowance of the claims.

Election/Restriction

Claims 8-16 are drawn to an invention nonelected with traverse. Because of the possibility of rejoinder of nonelected claims, these claims will be cancelled upon allowance of claims 1-7 and 18-20.

Art Rejections

Claims 1-7 and 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Smith in view of applicant's admissions. The Examiner concedes that Smith does not explicitly teach using the anion exchange column to remove tartrates, it is hereby stated that the column is, as it is operated as claimed. Smith is said to teach recirculation of the streams. The Examiner further concedes that Smith does not teach using a nanofiber as the membrane. Applicants are said to admit on pages 6-7 of the application as filed that the "possibility to substitute a filtration membrane to

increase or reduce pressure is well known and a comparison between nanofiltration membranes and reverse osmosis ones is made, for example, in Amati et al..."The Examiner reads this as admitting that nanofiltration membranes and reverse osmosis membranes are equivalent. Smith is also said to teach the use of electrodialysis.

This rejection is respectfully traversed. Both Ferrarini and Smith refer to ANIONIC exchange resin for removing negative ions, in particular tartrate ions derived from tartaric acid and acetate ions derived from acetic acid, or to an electrodialysis unit)see Ferrarini page 3, paragraphs 54-57 and Smith, column 3, line 65 to column 4, line 25). However, only Ferrarini teaches the use of CATIONIC exchange resin to remove potassium (K+) or calcium ions (Ca++), both of which are positive ions, from the permeate liquid.

At page 2, penultimate paragraph, of the Office Action, the Examiner admits, "While Smith does not explicitly teach using the ANION exchange column to remote tartrates, it is inherent that the column will as it is operated as claimed." Applicant concedes that Smith teaches how to remove tartrates and acetate from the permeate.

It is well known to those skilled in the art that the term "tartaric stabilization" refers to the control of

ionic balance in wine by removing potassium and calcium cations and tartrate ions, such as reported in FR 2709308, page 1, lines 5-10. In fact, it is usually known that grapes contain a high level of tartaric acid (from 1 to 3 g/L of juice) as well as a high level of potassium (from 0.8 to 1.5 g/L of juice). In stating on page 3, second paragraph of the Office Action, the Examiner alleges that it is well known in the art "to use a cationic exchange resin to remove potassium ions from the permeated liquid", citing as proof Smith, column 3 line 65 to column 4, line 25. However, Smith also disclose at column 1, lines 39-61, that subjecting juice to ultrafiltration to deactivate enzymes and ultrafiltration to isolate juice in a permeate which is then subjected to reverse osmosis treatment to concentrate the juice. The reverse osmosis retentate can also be treated to deacidify it, such as by the use of an ion-exchange column. However, this process would be deleterious in producing high quality wine or juice because anion exchange of the retentate removes both the undesirable components and components which are essential to the quality and value of the product. Thus, it is respectfully submitted, Smith teaches that ion exchange is only useful for removing "volatile acidity" from the wine. In Smith, the anion exchange column provides high pH conditions which hydrolyze ethyl acetate to ethanol and acetic acid, and

the positively-charged column absorbs substantially all of the acetate (column 2, lines 11-21).

In contrast to the Examiner's assertion, Smith does not teach at all the use of cationic exchange resin for tartrate stabilization and hence for removing potassium. In fact, Smith only considers the possibility of rinsing the **ANIONIC** resin for removing potassium after the column has been charged with 4% KOH solution for re-establishing the groups which are able to remove the tartrate ions. Smith refers to potassium ions (K^+) derived from the 4% KOH solution, not to potassium ions already present in the wine.

Moreover, it is quite evident to one skilled in the art that an anion exchange resin cannot remove positive ions such as potassium (K^+) or Ca (Ca^{++}) ions. Smith only teaches removing the negative tartrate ions with the aim of reducing the volatile acidity (VA) of the wine. Therefore, it is respectfully submitted that Smith teaches away from the present invention with respect to tartaric stabilization of wine, which requires removal of positive ions such as potassium and calcium ion.

Entry of the present amendment is respectfully requested, as claim 1 has been amended by incorporating claims 2 and 3 therein, which claims have already been considered.

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Thus, this amendment raises no new issues and contains no new matter.

In view of the above, it is respectfully submitted that the claims are now in condition for allowance, and favorable action thereon is earnestly solicited.

Respectfully submitted,

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